DOCUMENT RESUME

ED 165 611 HE 010 869

AUTHOR Van Dusen, William D.; And Others
TITLE Planning for a Statewide Educational Information Center Network.
INSTITUTION College Entrance Examination Board, New York, N.Y.
SPONS AGENCY EXXON Education Foundation, New York, N.Y.
PUB DATE 78
NOTE 41p.
AVAILABLE FROM College Board Publication Orders, Box 2815, Princeton, New Jersey 08541 ($3.50)

EDRS PRICE MF-$0.83 Plus Postage. HC Not Available from EDRS.
DESCRIPTORS *Access to Education; *Adult Education; Adult Students; Educational Demand; Educational Development; *Educational Opportunities; Educational Planning; Federal Aid; Financial Support; Guidelines; Information Dissemination; *Information Networks; Needs Assessment; Postsecondary Education; State Aid; *Statewide Planning; *Student Needs; *Systems Development
IDENTIFIERS *Educational Information Centers

ABSTRACT

A system of statewide educational information networks is proposed and plans for the implementation of such a network are presented. The need for a coordinated, well-administered system to disseminate information about educational opportunities is discussed with specific reference to the importance of reaching older learners, minority groups, urban and rural areas, and other underserved populations. How such programs can be identified and requirements they should meet are discussed. It is recommended that the network (1) be comprehensive and provide information about all education options and alternatives; (2) provide coordination to insure that the needs of the consumers are met, resources are not duplicated, and to monitor funding requests; and (3) evaluate the quality of the services offered. Three plans for organizing an educational information network are explained and methods for expanding and developing services are provided. Federal, state, local, and private sources of potential funding for an education information network are included. (BH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED165611

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

"PERMISSION TO REPRODUCE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

College Board

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM."

Planning for a Statewide Educational Information Center Network

William D. Van Dusen
Ronald H. Miller
Donna M. Pokorny

HE 010 869

Future Directions for a Learning Society

The College Board

Planning for a Statewide Educational Information Center Network

William D. Van Dusen
Ronald H. Miller
Donna M. Pokorny

College Entrance Examination Board, New York, 1978

The College Entrance Examination Board is a nonprofit membership organization that provides tests and other educational services for students, schools, and colleges. The membership is composed of more than 2,000 colleges, school systems, and education associations. Representatives of the members serve on the Board of Trustees and advisory councils and committees that consider the Board's programs and participate in the determination of its policies and activities.

Copies of this booklet may be ordered from College Board Publication Orders, Box 2815, Princeton, New Jersey 08541. Single copy, $3.50. For 5-24 copies, $2.80 each. For 25 or more copies, $2 each.
Editorial inquiries concerning this booklet should be directed to Editorial Office, The College Board, 888 Seventh Avenue, New York, New York 10019.

Copyright © 1978 by College Entrance Examination Board. All rights reserved.

Printed in the United States of America.

Publication of this report has been made possible by a grant from the Exxon Education Foundation.

What is FDLS?

The Future Directions for a Learning Society (FDLS) *program is a major effort toward the realization of a learning society in the United States. The program focuses on improving access and transition for learners, which has been the Board's role in education for more than 75 years. By building on recent Board programs that have increasingly focused on adults, the program extends its historic role to include assistance to adult learners and to the diverse agencies, institutions, and organizations that provide learning opportunities for them.*

Funded by the Exxon Education Foundation, FDLS *develops consensus and support for strategies, services, and policies that can best meet current and projected needs of participants and providers in a learning society. To this end, the program solicits and relies on the participation of professional people in the field, public policymakers, and the larger community. A major purpose of the Exxon grant is to promote the mobilization of additional funds and other resources necessary for major initiatives in this developing field. The initial support covers the project's planning and management, the identification and design of service areas, the review and analysis of public policy, and publishing relevant materials.*

The program will produce projections of future trends, information about the needs of learners and providers of educational opportunities and resources, policy recommendations, and services.

The program is engaged in finding better ways to gauge the needs of learners, in identifying the problems institutions face in meeting learners' needs, in strengthening learning opportunities, and in increasing public, professional, and political understanding of the field. A chief focus of the program is to demonstrate promising new approaches and specific services.

Contents

Foreword, Rexford G. Moon Jr. 1

What Is an Educational Information Center Network? 3

The Federal Effort. 5
Why Is a State Network Needed? 6
What Are the Characteristics of a Network? 8
The network is comprehensive 8
The network is coordinative 10
The network is evaluative 11

How to Build an Educational Information Center Network . . . 12

Identifying Needs and Resources 12
Organization 13
Expanding and Developing Information and Services 14
Evaluating and Improving Activities 16

Who and What Should Be Included 18

Identifying Components 18
The Network in the Learning Society 20

How to Fund the Network's Activities. 21

Federal Sources 21
State and Local Government Sources. 25
Private Agencies and Organizations 26
Clients' Fees 28
Payments by Institutions 28

Planning and Policy Considerations 29

Initial and Long Term Funding 29
Network Size 30
Developing Relevant Data 30
Choice of Delivery Systems 31
Planning Admonitions 32

Other Books of Interest from FDLS 35

Foreword

When Congress enacted the 1976 Amendments to the Higher Education Act of 1965, it created significant opportunities for establishing services to adult learners. Specifically, Title IA (Community Services and Continuing Education) and Title X (Community College and Occupational Education) provide for educational delivery systems and learning services for adults; Title IB (the "Mondale Lifelong Learning Act") describes the need to develop public policy and provides for demonstration models; and Title IV, Section B calls for linking learners and providers by means of new information systems. Thus, a comprehensive policy was established, and a program for carrying it out was delineated. The basic framework now exists for a bold national step into a completely new era of learning opportunity for adults. If the legislation is fully funded, the federal government will have made possible a learning society incomparable with any other – past or present.

In providing for the establishment of statewide Educational Information Centers, the federal legislation created an important basis on which programs can be built to overcome what has long been recognized as a significant deterrent to adult development through continuing education. In recent years more than 40 research studies have shown that there is an important gap, in all parts of the United States, between what adults need and want to do with respect to continuing their educations and what facilities exist to provide them with the information they need for success.

According to a recent study by the Stanford Research Institute, a growing subculture of so-called "information-poor" people, who are becoming less and less effective in meeting the demands of day-to-day living and increasingly dependent on others for survival, is developing in the United States today, particularly in the central cities but in some rural areas as well. The gap between those in the adult population who are "information-rich" and as a result more potentially independent, and those who are "information-poor" and more likely to be dependent on others has been widening for a number of years.

It is not surprising, then, that in February 1978 the College Board, the National Center for Educational Brokering, the Education Commission of the States, and the Institute for Educational Leadership, with the enthusiastic cooperation of the United States Office of Edu-

cation, held the First National Invitational Conference on Educational Information Services in Denver (attended by 176 people from 46 states, the District of Columbia, and two trust territories) to discuss methods for implementing the federal legislation. When the meeting convened, it became immediately clear that duplication of existing information sources—whether public or private—by a publicly funded agency was undesirable. Instead, what was called for was an overarching structure that would facilitate relationships, playing a catalytic role where appropriate and creating new services only where none existed already.

Three members of the staff of the College Board, Mr. Ronald H. Miller, Ms. Donna M. Pokorny, and Mr. William D. Van Dusen, have collaborated to produce this background paper on statewide educational information center networks. Unfortunately, it was not ready for distribution to the participants in the Denver conference but it is presented here as an aid in the planning process in future meetings and for the personal use of planners, managers, and policymakers as these important centers begin to take shape. The writers have considered the statements and group discussions of the Denver conference in preparing this manuscript; others who made subsequent significant contributions to it include Francis U. Macy and James M. Heffernan of the National Center for Educational Brokering, Norman D. Kurland of the New York State Education Department and Paul Franklin of Harrisburg Associates. Their comments and suggestions are much appreciated.

We hope this booklet will help to stimulate thinking and discussion as the substance and content of new educational information services begin to take shape, as more is learned about their potential clients, and as arrangements to train and provide support for the new professional staff that will be needed are developed. This will be the focus of our future directions.

Rexford G. Moon Jr.

October 1978

What Is an Educational Information Center Network?

People learn about educational opportunities in various ways. Colleges, universities, trade schools, and vocational institutions all have organized methods for informing potential students of their offerings; public and private brokering services help prospective learners to assess their interests and match them with appropriate learning opportunities; federal and state agencies either dispense information about learning opportunities directly or through their funded agencies; libraries, museums, clubs, churches, and many other educational providers use various media to inform potential learners of their offerings; and businesses and industrial and labor organizations disseminate information to their employees or members about educational opportunities that they themselves provide or that they recommend.

Newspapers, radio broadcasts, and television programs carry information about educational opportunities. The centerfold of *TV Guide* lists "25 opportunities worth looking into" that range in content from courses leading to an associate degree in accounting to those leading to a certificate in writing nonfiction. *Better Homes and Gardens* describes "how to learn something new without going back to school" and directs its readers to community activities whose educational content is varied.

These are only a few of the many sources of educational information to which potential learners can turn and every year more of them are doing so. Increasing numbers of adults are seeking to upgrade their skills, retrain for new jobs, study to increase their enjoyment of retirement or leisure time, and educate themselves for entry or reentry into the job market at the same time that formal elementary, secondary, and postsecondary institutions are concerned about the decreasing college-age population. This situation calls for a coordinated system that would provide information about opportunities available, specifically relate them to various career opportunities, and counseling and advisory services that would help the consumer connect the two. In response to the burgeoning demand for information, counseling, and advisory services, the Congress authorized the establishment of "educational information centers" in Section 418 of the Education Amendments of 1976. The United States Commissioner of Education is authorized to provide funds to the states to establish centers "to provide educational information, guidance,

counseling, and referral services to all individuals . . . in a geographical area no greater than that which will afford all persons within the area reasonable access to the services of the Center . . . ."

A survey to identify existing educational information outlets and services and to coordinate them with center activities is provided for. It may not be necessary to establish a physical "center." Where possible, the funding provided by the federal government should be used to create and maintain a network, building on agencies already in operation and coordinating existing resources. In some areas, however, it will likely be necessary to establish new centers. Local facilities such as libraries, empty university offices, fraternal meeting halls, and so on, should be utilized to fill in the gaps.

The three major goals of establishing a statewide network would be:

1. To assure access to accurate information and high quality counseling, guidance, and referral services by all people—regardless of background, age, interest, and ability. The network would:

- assist in defining individual learning goals and objectives;
- provide information about widely varying opportunities;
- facilitate access to those opportunities.

2. To coordinate existing information services to assure:

- access for all people to information about learning and training opportunities appropriate to their needs;
- factual, complete, impartial presentation to potential learners;
- efficient and economical use of federal, state, and local resources.

3. To evaluate the accuracy and usefulness of the information being disseminated.

Some services can be centralized to help reduce duplication and to produce economies. Staff training programs can be developed at the state level for use by various service agencies. A central, comprehensive information bank can be made available to local providers at less cost than when information files are developed and maintained individually. Consistency of information and quality of service should characterize any statewide network.

The Federal Effort

The Educational Information Centers program is only one in a series of federal initiatives intended to expand access to and equalize choice among various educational and career opportunities. It creates an opportunity to integrate federal, state, local, and private efforts in support of information and services that will contribute to the development of a total learning society.

Until recently, efforts at providing educational information to people who were beyond compulsory school age were limited, both in the kinds of information provided and the audiences to which it was addressed. The main source of information had been college catalogs and handbooks, and occasionally high school guidance counselors would attempt to interpret catalogs for potential students. Typical audiences were high school students. Little attention was paid to older, out-of-school adults and those few who did happen to find their way to the information and advisory channels were often treated as unwanted visitors. The federal government has now formally recognized that today many citizens seek educational opportunities in the whole universe of postsecondary education rather than in the more restricted world of the institutions of higher education. Providing factual, comprehensive, impartial information and counseling will help to persuade various new consumer groups to participate in the so-called "learning society." This federal effort is illustrated in several ways. Participation in the federally-funded Basic Educational Opportunity Grant Program (BEOG) and the Guaranteed Student Loan Program is open to learners who attend many different types of postsecondary educational institutions. The total federal outlay for student support in fiscal year 1977 rose to $7.321 billion and, in addition, this effort is supplemented by funding provided through such programs as those sponsored by the Comprehensive Employment and Training Act of 1973 (CETA).

The earliest federal information efforts were directed at segments of the population that were particularly underrepresented in postsecondary education. For example, the Talent Search program was intended to identify talented youth with financial or cultural needs, inform them about resources, and encourage them to enter postsecondary programs. The Upward Bound Program provided support for developing "survival skills" for potential postsecondary

students from minority or poverty families. Educational Opportunity Centers were established in low-income areas to provide information, assistance, and support. More recent federal efforts have been directed toward providing better information and broadening the audiences to include, especially, out-of-school adults. The Fund for the Improvement of Postsecondary Education (FIPSE) expended major grant funds to provide "better information for student choice" about a wide variety of postsecondary opportunities[1] and by the Vocational Education Act, CETA, the Career Education Incentives Act, the Youth Employment and Demonstration Project Act, and other similar legislation. Information, guidance, and advisory activities are being expanded to consumer-oriented counseling and information services, educational brokering agencies, computerized educational and occupational information banks, and telephone information services have all been recent developments. Thus, the EIC program is an extension of a federal effort that has been developing for about 20 years.

Why Is a State Network Needed?

A statewide information network is needed because of the abundance of educational opportunities and information about them; because both opportunity and information are unequally available; and because a coordinated system, well administered, can assure honesty, economy, and efficiency as well as expanded accessibility to all potential learners.

The American postsecondary educational system has been described as a "cafeteria" of opportunities from which potential learners can pick and choose the ones best suited to their needs and interests. But the distinctions among opportunities are not always clear. The state, as the major provider of public education (through financing) and the "evaluator" of private education (by its licensing and certifying procedures), has a responsibility to assure that the potential learner has an opportunity to see and understand the differences among the available opportunities. But most states have

1. Two relevant reports are Elaine El-Khawas, *Better Information for Student Choice: Report of a National Task Force* and Joan Stark, *Inside Information: A Handbook on Better Information for Student Choice*. Washington, D.C.: American Association for Higher Education, 1978.

not accepted responsibility for this until recently. The primary providers of information have been those who supplied the education and training; they have not always been impartial and honest, and few restrictions were placed upon them.

There are still problems with delivery systems. Those designed for students in transition from high school to college are frequently inadequate to meet the needs of other types of learners, but most state and local funds for educational guidance are directed to secondary schools. Alternative delivery systems will have to be developed to serve the new populations, and the quality, quantity, and comparability of information provided will have to be improved.

In addition, at this time, educational information services are not equally available geographically. Some centers focus on specific subpopulations with identified needs, for example, Educational Opportunity Centers, Talent Search agencies, and other inner-city social agencies whose primary target groups are low-income populations.

Gaps can be filled by broadening the scope of the services already in existence or by establishing new services, but determining the most efficient and effective way to fill the gaps will require important and sometimes difficult decisions. For example, a successful women's program in an inner city may find its effectiveness curtailed if required to broaden its base to serve all the area's residents. But, on the other hand, establishing a new agency to serve those not currently eligible to use the women's center would require numerous and costly duplications.

Those without access (certain older people, those who are physically disabled, or people who are homebound for other reasons) would find it difficult, if not impossible, to utilize centralized offices and for many the development of statewide telephone "hot lines," telephone counseling facilities, or in some cases advisory services that move regularly from place to place on a specified schedule should be established. Because of competition for students among providers, likely to increase in the immediate future, the approach to information and advising could become institution-centered rather than client-centered but a publicly funded statewide network can be impartial, can require more accurate and timely information from education providers, and can be more encompassing in its outreach.

Existing agencies may fail to coordinate their services and activities; successes of one group or one agency may not be translated or transported to other efforts dealing with the same or different target groups; information about one program may be widely known while information about another comparable program is buried. A statewide coordinated system could smooth out some of these ridges and valleys and direct new resources to areas of determined need; overlapping activities could be reduced; and cooperative ventures that utilize the best points of each agency could be encouraged.

And there are other reasons for state coordination. As a major provider of education, the state has an important investment to protect; information dissemination would contribute significantly to that as well as to the achievement of other state goals such as reducing unemployment, cutting the welfare burden, reducing school dropout rates, and so on.

What Are the Characteristics of a Network?

Although the educational scene may vary from state-to-state, and the mechanisms it chooses to establish may differ, an effective state network of educational information and advisory services should have three common characteristics: it must be comprehensive, coordinative, and evaluative.

The network is comprehensive. The network must provide information and advisory services about all educational options and alternatives. This does not mean that a state network's constituent agencies should not provide services tailored to the needs, interests, experiences, and concerns of particular segments of the community. Women's centers probably should continue to serve women, college fairs the college bound, and high school guidance offices prospective high school graduates. But the network should identify and explore additional relevant educational opportunities. Existing resources can be cataloged so that consumers can be matched with providers where their needs can be met, or new resources can be developed to meet the needs of those not accommodated by current systems and providers.

It should be noted that developing a comprehensive system implies the infusion of new money; funds should not just be redirected

from services for one constituency to provide for another. Economies can be achieved by eliminating unnecessary duplication, and thus some funds will be freed to establish new activities or to expand others.

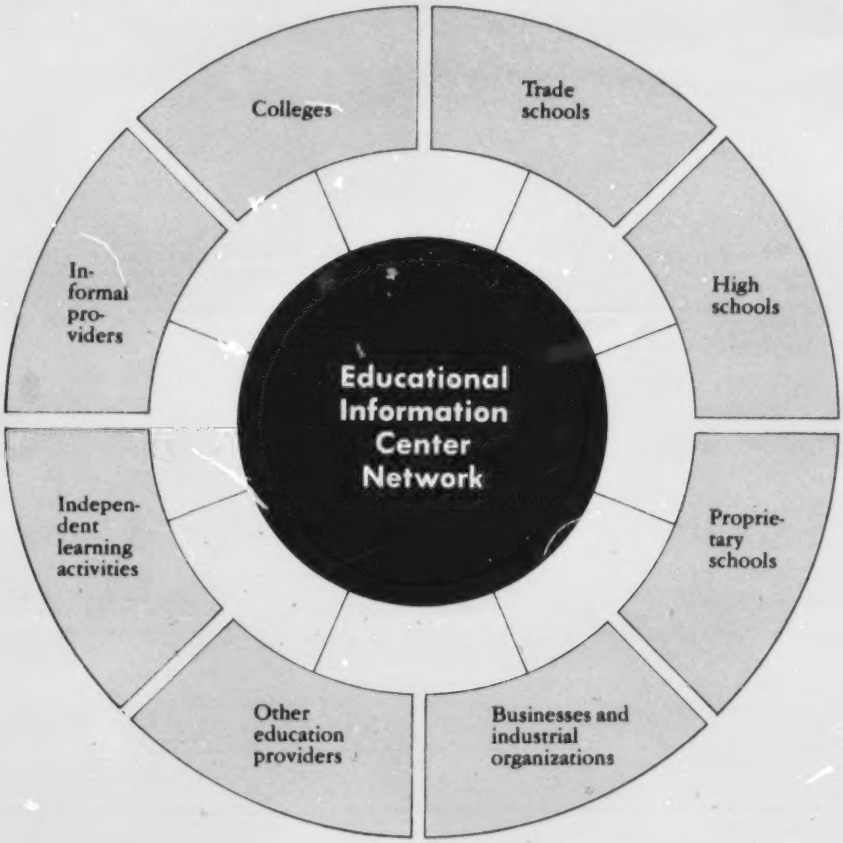
The network should prepare to support people who move into, through, and out of learning experiences in varying ways. In recent years, the educative process was thought of as an activity that began in kindergarten and continued in a more-or-less direct line through elementary school, high school, and then on to college or a job. In an adult learning society the network can help to create ways in which learners can move from one area to another, progressing directly to a high school diploma or college degree or shifting modes as interests, needs, and resources change.

Figure 1 (page 10) illustrates a truly comprehensive network.

Gathering information about formal learning opportunities, while perhaps time consuming and expensive, is not difficult to do. By definition, formal learning opportunities have a structure, a locus, and usually printed materials of various kinds—catalogs, prospectuses, bulletins, and schedules of classes that can be identified, described, and evaluated. Institutions will have established working hours, mailing addresses, and telephone numbers where inquiries may be made. Some will have staff people whose responsibility is to confer with those in a position to refer potential learners to them.

But many informal educational opportunities are very difficult to locate and to categorize in ways that are conducive to easy handling by computers. Communications about informal learning opportunities appear, for example, on bulletin boards in shopping centers and laundromats, in inhouse newspapers and newsletters, on telephone poles, and on vacant walls. Many opportunities are created *ad hoc* as a person or group recognizes the conjunction of a need and an educational resource. Many do not recruit participants but take all who come. Communication points may be known to initiates only, may rotate frequently, and may be available at odd times or for limited periods. It is possible, though not easy, for a state network to obtain information about these informal learning opportunities, combine it with information about formal education opportunities, and make it available in forms useful to potential learners. A local agency can

Figure 1. A Comprehensive Educational Information Center Network



then supplement this with more specific information about local options. Thus, both the statewide network and the local agency each make singular contributions.

The network is coordinative. Coordinative activities will require involving numerous people and agencies in the planning and operating process. State and federal agencies that provide funding, educational institutions that furnish opportunities, local agencies that make information and advice available, businesses and industrial

organizations that provide career and employment opportunities, and potential learners must be brought together:

1. To identify the needs of consumers.
2. To survey existing information and advisory resources.
3. To identify duplicative efforts and service gaps.
4. To develop a plan for coordinating needs and resources in the most efficient and economical way.
5. To prepare funding requests for support required for implementation.

Thus, the network can begin to take form, although full implementation will take time. Identifying people to work with the service and funding agencies, developing an organizational framework, and at the same time establishing the crucial interpersonal relationships of trust and cooperation, while reorganizing existing funding sources as well as securing new moneys will demand effort, expertise, and patience.

The network is evaluative. The network will have to be evaluative. It should identify existing services, assess their effectiveness, delineate educational and career information needs, describe important omissions, and evaluate the quality of the information it gathers and disseminates.

Learners can also evaluate the type and quality of the information and advice they receive through the system. The network can become a useful agency for evaluative action between consumers and providers (both providers of information and providers of opportunity). Within a statewide network, this kind of evaluation can take place in an organized setting and can lead to creative, positive change.

How to Build an Educational Information Center Network

The state's role in developing a network is to identify people's educational and career information needs and the currently available resources; to create a structure in which consumers and providers can work together to establish goals; to seek funding to expand current activities and develop new ones; and to establish effective evaluation procedures.

Identifying Needs and Resources

First, what potential learners want and need to obtain the education or training they seek must be determined, and existing providers must be identified. These data already exist in some areas. The most comprehensive recent work of this type was done by the National Task Force on Better Information for Student Choice (BISC) in 1978. Its final report[2] includes information about academic offerings and requirements, costs and financial aid, environment and student body, and outcomes and results of attendance for different groups of students (including adult learners, racial/ethnic minority groups, and participants in correspondence school study). Specific needs assessment information is reported by Kinnick and Lenning in *The Information Needs of Prospective Students* (available from the National Center for Higher Education Management Systems, Boulder, Colorado). In 1972[3] a study conducted by the Commission on Non-Traditional Study provided baseline data on characteristics and needs of adult learners. Subsequently, more than 30 state and national needs assessment studies have been undertaken. Some of these are broad-based, others are more specific. They have been summarized by K. Patricia Cross in "Adult Learners: A Data-Based Description,"[4] and a more recent publication by Dr. Cross, *The Missing Link: Connecting Adult Learners to Learning Resources* (New York: College Entrance Examination Board, 1978) provides new insights for state planners as they begin to establish educational information center networks.

2. Elaine El-Khawas, *Better Information for Student Choice*.

3. Commission on Non-Traditional Study, *Diversity by Design*. San Francisco, Calif.: Jossey-Bass Inc., 1973.

4. In R. E. Peterson et al., *Toward Lifelong Learning in America: A Sourcebook for Planners*. San Francisco, Calif.: Jossey-Bass Inc., in press.

Some planners may find the information already available enough to proceed. Others may decide that additional research is needed to identify needs in their state, but in either case the writings of Cross and Kinnick and Lenning provide a useful place to begin.

Second, the organizations and agencies already providing information and services to potential learners must be identified. Some of these can be listed readily: school guidance offices, postsecondary institutions, talent search agencies, educational clearinghouses, brokering agencies, and so on. Others, including informal community-based groups or organizations oriented to serving specific types of potential learners, will be more difficult to identify. State network planners may find educational providers themselves, as well as current participants in the educational process, are valuable sources of information. A broad-based inventory of needs and resources is the goal.

Organization

A governance and management structure is needed next. Three types have been suggested: an independent single-purpose state agency; an existing agency with a related purpose; or a consortium of unaffiliated existing agencies. The choice among these options, and perhaps others, is probably a function of state needs and organization.

A single-purpose agency, comparable to the independent 1202 Commissions established in some states whose purpose is to coordinate postsecondary educational development, could be established. Agencies of this type do not need to justify themselves in respect to the contributions they make to other programs. Institutional neutrality would probably be best attained in an independent agency.

Locating an educational information system within another agency that has a related purpose is a possibility. For example, a student financial aid commission might have mutual interests and be a logical place to locate the network. But care must be taken to assure that the network's clientele (both institutional and individual) is not limited to that of the sponsoring agency. Financially needy and informationally needy are often not synonymous. Another potential problem in affiliating the information system with an agency whose

primary purpose is different, is that the information function may become confused. For example, if the information system is lodged in a postsecondary education commission, potential learners may assume it provides information only to those interested in postsecondary education and people interested in trade-school information may not seek it out.

A third possibility is a consortium of unaffiliated existing agencies, institutions, and systems that capitalizes on the strengths, skills, data, and reputations of all of them. Existing services can benefit from affiliation and coordination; new resources can be directed toward new services. Although the problems of bringing together diverse personalities and purposes can be great, possible long-range benefits may outweigh the short-range difficulties.

One mechanism for implementing the consortium idea, proposed in the EIC plan for the state of Illinois, is to establish an "assembly" of institutions, agencies, and systems involved or interested in providing educational information to potential learners. The members of that assembly could assist in developing goals and objectives, identifying existing and missing services, and monitoring successes and failures. This concept brings together the administrative convenience of housing the system in an established agency (where financial, personnel, purchasing, and other necessary services are already available) and the creative energy of diverse organizations.

Financial implications of the consortium concept are important. Participating agencies can bring to the system their own funding and provide "in-kind" support, but some will, inevitably, bring their own unmet needs.

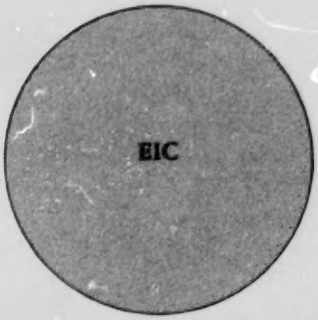
Expanding and Developing Information and Services

The statewide network can be most useful in filling gaps in the services that will be identified by the surveys of needs and resources. Encouraging expansion of existing services, developing branch operations, and exchanging information on services and programs that can be used by others should be primary purposes of a state network.

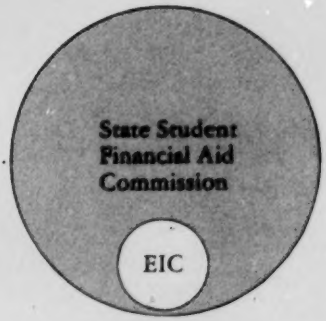
A network should function as a full service bank does. To do that, it will need to plan ahead to develop new services for needs recog-

Figure 2. Three Ways to Organize an Educational Information Center Network

1. Independent single-purpose state agency . . .

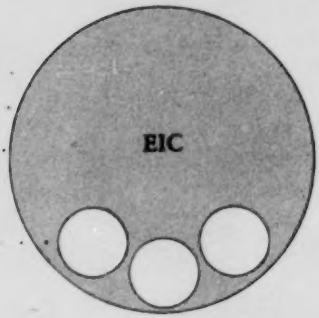


2. House EIC with another agency . . . . . .



3. Operate EIC through consortium of unaffiliated existing agencies. . . . . .

Other existing agencies. . . . . .



nized by the general population (for example, no information may be available on access to vocational and technical schools) or by specific target populations (no advisory services may be available to

women seeking to reenter the job market). Needs may also result from geographic location – large cities may have excellent information services while rural areas have none at all.

Sometimes the gap can be filled by expanding an existing service or agency, for example, an agency that maintains information about access to degree-granting institutions probably could expand activities to include information about vocational and technical schools without any difficulty.

To a lesser extent, needs in a specific geographic area can be filled by expanding an existing service. A city information agency might be persuaded to establish a branch in a nearby town. Initially, the branch could use "transferred" services and activities but before long local interests will likely lead to the development of local services and programs if these are appropriate and the need continues.

It may be more difficult to establish services for specific target populations, but a coordinated network will be most likely to find ways to do so because of the variety of resources at its disposal. A network can encourage others to develop new services, or can fund a new "grassroots" organization if this seems appropriate.

The full service concept is fundamental to the completely developed network of information and advisory services. It may not be possible in the first year or two of operation, but should be a goal to work toward right from the start.

Evaluating and Improving Activities

The long-range effectiveness of a network will be determined by its degree of success in evaluating its own activities and adapting to changing conditions. Priorities will shift, funding levels will vary, and client needs will change, calling for continuous evaluation and review.

Evaluative reports, both formative and summative in nature, are needed for the use of policymakers, service providers, and funding sources. Evaluations should not be restricted to the network's clients – efforts must be made to determine the composition of the populations that do not make use of the program. Comparisons of information from users of the network with that of a control group of nonusers would permit appropriate conclusions to be drawn. How-

ever, funds for developing control groups may be difficult to obtain. Although some states will be able to develop new survey forms and sampling techniques to elicit information, other states will find it necessary to utilize information from surveys already completed. Advance planning is especially necessary to do this effectively. Two useful books for help in developing research designs and procedures are: *Experimental and Quasi-Experimental Designs For Research* by Donald T. Campbell and Julian C. Stanley (Chicago: Rand McNally College Publishing Company, 1966) and *Evaluating Educational Programs and Products* edited by Gary D. Borich (Englewood Cliffs, New Jersey: Educational Technology Press, 1974). In the latter book the chapter by Andrew C. Porter and Thomas R. Chibucos is especially pertinent.

Much of the information needed for summative evaluation of the network may seem irrelevant to the day-to-day operation of its constituent agencies. And there may be conflicts, as service agency managers may be unsympathetic toward network research needs. In fact, the most effective staff members of the information agencies are most likely to be those who direct their efforts toward identifying and meeting client needs and not to measuring change and preparing reports. Indeed, some staff members may believe that collecting evaluative data would influence their relationships with clients. Planning and evaluating agents must make clear to those who are actually providing services to potential learners through the network's participating agencies that management planning and evaluation are crucial to their continued ability to provide those services.

It is by the changes effected in the lives of the network's clients that the social benefits of its services should be measured in the long term, but short-term evaluations can be useful too—measures of clients' characteristics and their opinions of the effectiveness of the network's services are needed. Long-term followup is difficult to carry out, but plans for it should be incorporated in the planning stage of establishing the network.

Who and What Should Be Included

The most appropriate role for states is a catalytic one—to bring together the numerous existing centers into a coordinated, comprehensive network that can capitalize on the strengths of current centers and services and efficiently and economically develop new or expanded ones. What are these existing centers?

It has been noted that many centers do, could, or should serve both as providers of information and services and as providers of education. Learning opportunities and educational providers do not always have the words "school" or "college" in their titles and the results they achieve cannot always be measured in credit hours and degrees. Teaching a potential learner how to find his way through a college catalog in a library is both educational and provides educational information. A newspaper article can inform a potential learner about a new class at a community center or it can publish the class material for individuals to study at home.

Identifying Components

To identify components of a network, planners will have to compile a list of agencies, programs, and services that provide or disseminate educational information. Fortunately, checklists are available. *A Handbook of Terminology for Classifying and Describing Adult Learning Activities* (Washington, D.C.: National Center for Education Statistics, in press) includes a comprehensive list of providers.

Richard Peterson makes an important distinction between deliberate education and learning (which occurs in the schools, nonschool organizations, and by individually used sources) and unintentional learning (which occurs in the home, at work, from friends, and from the mass media). Selected learners who utilize various deliberate and unintentional techniques could help planners as they seek to identify the domain of the ERIC network. Once the list is compiled, the primary source of information should be contacted, whenever possible. For each type of provider, the first step is to ascertain the primary source of information. For educational organizations, authority to provide instruction, offer awards for completion, and receive financial aid for students is granted by, among others, regional accrediting associations, state departments of education, or education commissions. Certain programs, such as those of the Veterans

Administration, require that institutions be on eligibility lists. Institutions whose primary mission is not educational can also be identified from primary sources. For example, Roman Catholic dioceses will have directories of their schools and agencies.

When primary sources are not accessible, a search should be made for secondary ones, for example, national, state, or local association directories; telephone directories, particularly the yellow pages, will be useful, and sometimes local social services listings are available. When the potential members of the network have been identified, procedures for verifying and regular updating of the information on file about them should be established. The degree and kind of coverage within any category of provider is best decided by regional area representatives of the network. However, additional grants for planning and operating the network would allow for increased coverage. There is no reason to exclude national or regional organizations that provide information about learning opportunities and/or support to providers of information. They represent resources that can support both the planning for educational information center networks and their operation.

There are already a number of broad-based service agencies that provide information about educational opportunities, for example, the American College Testing Program, the National Center for Education Statistics, and the College Board regularly issue publications on postsecondary educational opportunities, needs of prospective learners, and characteristics of participants. Many organizations also provide consultative services, guidance publications, movies, training, and other products and activities that can be utilized by state networks. A second category of interstate agencies that could be included is special purpose associations and organizations, for example, the Adult Education Association of the U.S.A., the National Association of Public Continuing and Adult Education, the National University Extension Association, the American Library Association, the American Management Associations, and the National Association of Educational Broadcasters as well as organizations that represent potential consumers, for example, the National Student Lobby, the American Association of Retired Persons, and the Rural Education Association. A useful comprehensive listing will be found in Chapter 6 of *Toward Lifelong Learning in America: A*

Sourcebook for Planners by Richard E. Peterson et al. (San Francisco, Calif.: Jossey-Bass Inc., in press).

There are a few organizations that provide service and support specifically in the area of information delivery and information systems. Two examples are the National Center for Educational Brokering, 1211 Connecticut Avenue, N.W., Washington, D.C. 20036 and the Center for Helping Organizations Improve Choice in Education (Project CHOICE) c/o School of Education, University of Michigan, 2001 School of Education Building, Ann Arbor, Michigan 48104. The purpose of these groups is to improve mechanisms for providing information to all potential learners and to upgrade the quality of information provided. These special agencies can enrich the flow of information to and through the educational information center network.

The Network in the Learning Society

In the immediate future the United States will need to provide greatly increased educational information services to a wide variety of its people. James A. Norton, former chancellor of the Ohio Board of Regents, has characterized educational information centers as "potentially the most potent mechanism for change available to post-secondary education in the 1980s." By integrating centers into a comprehensive and coordinated network their potential as the "honest broker" that brings learner and opportunity together can be further enhanced.

How to Fund the Network's Activities

The federal appropriation for the Educational Information Centers program is not intended to pay the total expenses of a state network and its participating centers and agencies. In order to receive the federal share (two-thirds), the state agency responsible for the network must provide the federal government with assurances concerning the source and availability of state, local, and private funds to meet the remaining one-third share of the cost.

In fiscal year 1978, $2 million was appropriated to implement Section 418 to be divided among all the states and territorial jurisdictions. For fiscal year 1979, the recommended appropriation is $3 million.

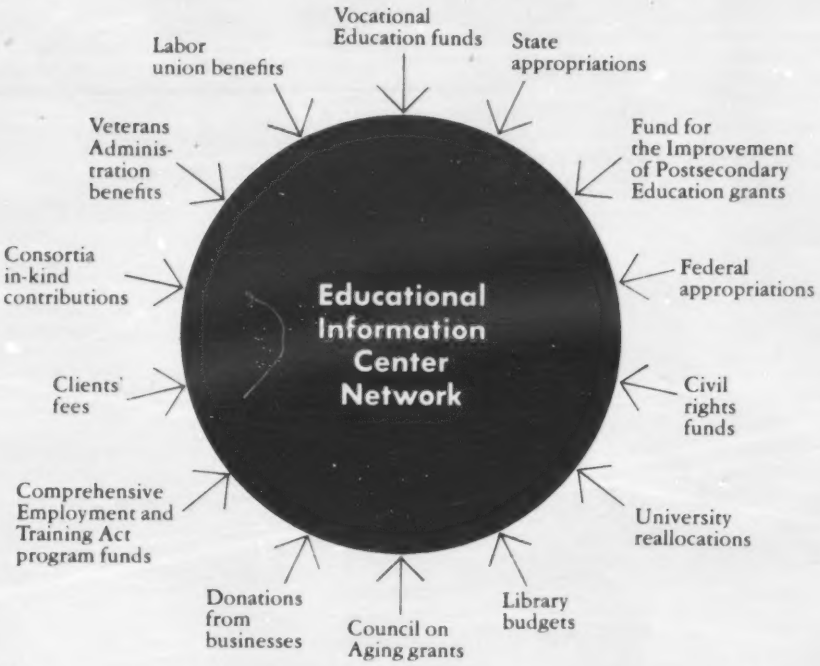
Network support could come from other federal sources (although such funds would not satisfy requirements for the nonfederal matching share of the Section 418 grants), from state or local appropriations, new state legislation, private agencies and foundations, and clients' fees. All these resources can be incorporated to provide a comprehensive system of funding, as illustrated in Figure 3 (page 22).

Federal Sources

There are substantial federal resources intended for and now being used to provide information and guidance services to potential learners. Some of these are explicitly for educational information (as in the case of funds provided through the Office of Education for the operation of Educational Opportunity Centers). Others have their major emphasis in other areas, but incidentally provide support for educational information. A College Board survey of federal legislation[5] has identified sources from which funding for educational information centers might be derived. The following list, although not comprehensive, suggests the wide variety.

5. For more detail and explanation, see P. Christoffel, N. Ehrlich, and F. Macy, *Federal Programs Authorizing Educational and Occupational Information Services*. New York: The College Entrance Examination Board, 1978.

Figure 3. A Comprehensive System of Funding for EICs



Sources in the Department of Health, Education, and Welfare

Educational Opportunity Centers

(Title I and Title IVA, Section 417 of the Higher Education Act of 1965) provides funds to agencies concerned with counseling, tutoring, and information dissemination to low-income populations.

Talent Search

(Title IV, Section 417B of the Higher Education Act of 1965) supports programs identifying youth with financial or other need having potential for postsecondary education or training.

Fund for the Improvement of Postsecondary Education (FIPSE)

(Title III, Section 404 of the Education Amendments of 1972) makes grants to innovative programs in postsecondary education. A number of community-based educational and occupational advisory services have been funded each year.

Community Service and Continuing Education

(Title I, Sections 101, 102, and 111 of the Higher Education Act of 1965) encourages colleges and universities to assist in the solution of community problems by strengthening community service programs.

Adult Education Grants

(Title III, Sections 309 and 309A of the Adult Education Act) expand programs to provide adults with education and training to enable them to become more productive and responsible citizens.

Lifelong Learning Program

(Title I, Part B of the Higher Education Act of 1965) supports needs assessments and demonstrations to improve techniques to provide guidance and counseling to adults. A "clearinghouse" of information concerning lifelong learning programs is specifically authorized.

Institutional and Financial Assistance Information for Students

(Title IV, Sections 493A and 493B, Title I, Part D of the Higher Education Act of 1965) requires institutions receiving federal financial aid funds for administrative expense purposes to implement financial assistance information dissemination activities for prospective and enrolled students.

Incentive Grants for State Student Financial Assistance Training

(Title IV, Section 493C of the Higher Education Act of 1965) authorizes the use of federal funds through states to develop programs for increasing proficiency of student aid personnel.

Vocational Education Program Improvement and Supportive Services

(Sections 130-135, Subpart 3 of the Vocational Education Amendments of 1976) assists states in, among other things, providing guidance and counseling services, programs, and activities.

Educational Packaging and Dissemination

(Section 422 of the General Education Provisions Act and Section 402 of the Special Projects Act) supports development and demonstration programs specifically designed to bring potential learners together with learning providers.

Rehabilitation Services

(Rehabilitation Act of 1973) authorizes counseling and employment placement services for persons with mental or physical disabilities.

Rehabilitation Long-Term Training

(Sections 203 and 400 of the Rehabilitation Act of 1973) specifically supports projects designed to increase personnel working in programs providing services to physically or mentally handicapped persons.

Handicapped Regional Resource Centers

(Title IV, Section 633 of the Education for the Handicapped Act) establishes regional resource centers to provide advice and technical services to educators for improving education of handicapped children.

Women's Educational Equity

(Section 408 of the Women's Educational Equity Act of 1974) supports projects for the guidance and counseling of women seeking education.

Veterans' Cost of Instruction Program

(Title X, Section 420 of the Higher Education Act of 1965) encourages the support of programs to counsel and advise veterans about available tutorial assistance and other educational programs.

Library Services

(Title I, Sections 101 and 102 of the Library Services and Construction Act) supports libraries as resource centers to provide access to educational opportunities.

Career Education Incentive Act

(Sections 5, 8, 11, and 12 of the Career Education Incentive Act) specifically authorizes states to develop and implement career guidance, counseling, placement, and followup services.

Community Education

(Title IV, Section 405, Special Projects Act of the Education Amendments of 1974) supports educational and other community services.

Consumers' Education

(Title IV, Section 402 of the Education Amendments of 1974) assists in the dissemination of information relating to consumer education programs in elementary, secondary, and postsecondary institutions.

Educational Research and Development

(Section 405 of the General Education Provisions Act as amended by the Education Amendments of 1976) provides funds for the dissemination of information relating to educational research.

Strengthening State Departments of Education

(Title V, Section 502 of the Elementary and Secondary Education Act of 1965) supports dissemination of information relating to the condition, progress, and needs of education in the states.

Sources in the Department of Labor

CETA

(Title I of the Comprehensive Employment and Training Act of 1973) establishes a nationwide program of comprehensive employment and training services at the state and local levels to provide recruitment, orientation, counseling, testing, and job-related training.

YEDPA

(Title III, Part C, and Title VIII of the Comprehensive Employment and Training Act of 1973 as amended by the Youth Employment and Demonstration Projects Act of 1977) enhances career opportunities for young people by providing counseling, outreach programs, and occupational, educational, and training information.

National and State Occupational Information Coordinating Committees

(Vocational Education Act of 1963) supports improved communication and coordination among vocational education and employment and training programs.

Sources in Other Federal Agencies

Veterans Assistance Centers

(38 U.S.C.) provide services and counseling with emphasis placed on problems of educationally or economically disadvantaged veterans.

Two of these sources deserve special attention. The 1976 Education Amendments specifically authorize and require as a first priority postsecondary institutions to use a portion of the four percent allowance they receive to administer the federal campus-based student aid programs* for providing information to students. And the federal Basic Educational Opportunity Grant Program (BEOG) legislation provides $10 per enrolled Basic Grant recipient for dissemination of information about financial aid resources.

* Supplementary Educational Opportunity Grants (SEOG), College Work-Study Program (CWSP), and National Direct Student Loans (NDSL).

State and Local Government Sources

As with federal funding, money can come from various state and local government sources. An important source can be in-kind support provided by assigning state administrators, school counselors, librarians, and others to work in and with educational information services. Providing space, computer facilities, telephones, printing and duplicating services, travel expense support, and so on, can meet the one-third matching requirement of the Section 418 grants in addition to contributing to the network's effectiveness.

Some states have already established statewide educational and occupational information networks. Oregon, with support from the Department of Labor, has implemented a computerized career information system that can be accessed through terminals located in high schools and community colleges, in prisons, and in employment service and welfare offices. Portable terminals are frequently taken to county fairs, rodeos, and shopping centers. While the primary emphasis of the system is on information about careers and occupational opportunities, it also includes information about educational opportunities, costs, aid, and application procedures. The Oregon system is currently being transported to 12 other states.

Other states direct funds for educational information to areas of specific concern. California allocates $6 for every recipient of a state scholarship or grant (currently 4.25 percent of the high school graduates in any given year) for "the purpose of disseminating informa-

tion about all institutional, state, and federal student aid programs to potential applicants." Pennsylvania maintains nine regional offices of its Higher Education Assistance Agency to work directly with potential learners and with secondary schools. Illinois supports an Office of Information Services with three offices staffed by four full-time professional people, five full-time supporting staff members, and large numbers of part-time student employees.

Local efforts to provide educational information are found primarily in the elementary and secondary schools. Students who seek access to careers by means of other learning opportunities are one important group an educational information center network can serve. An out-of-school adult seeking to reenter the educational system by completing high school is another. Community halls, recreational centers, libraries, and other local facilities have staff and support resources that can provide grassroots funding. Some would argue that these resources are the most effective in the system for they provide ongoing contact with the potential learner in a casual, nonthreatening atmosphere.

Facilitating the use of local financial resources is an important reason to establish a network. An initial survey of current resources will likely identify sources of money; coordinating and targeting those resources can produce significant economies.

Private Agencies and Organizations

Many private agencies and organizations already have, or could be persuaded to have, an interest in providing information about learning opportunities. Some of them serve specific interests while others support broad-based activities.

Some of the private foundations are possible sources of funding for state networks. First, those that have been active in the state should be identified, and an analysis made of their previous awards. Useful information may be obtained by writing to The Foundation Center, 888 Seventh Avenue, New York, New York 10019, requesting booklets on the center's services and instructions for preparing funding proposals.

Business and industry constitute one segment of the private community that has a particular interest in supporting programs of edu-

cational information. Affirmative action programs have placed particular emphasis on disseminating information about available educational opportunities. Upgrading workers' skills that improve performance and productivity is another reason businesses are interested in making information available. Sometimes an industry-wide interest can be generated, in other instances, it will be limited to a particular firm or plant. A statewide network could contract with businesses or industrial organizations, or groups of these, to provide whatever types of educational information are desired. And it can work both ways: occupational information gleaned from these firms can help to develop alternatives for the network's clients who are seeking to enter the labor market or to make a transition within it.

Labor and trade unions are another potential source of private funding. Many unions require employer funding of employee and/or employee dependent education for their members. Much of this money now goes unused. To the extent that its lack of use can be attributed to lack of information, a network could fill in the gaps —and because of its comprehensiveness and its independent character, could probably provide the best service of this type that a union could secure.

Other organizations, lacking money for network support, can be encouraged to provide contributions in kind. Space can be lent in churches and club buildings. Identifying local resources can become a project for a social or civic group. Parent-teacher associations, dads and moms clubs, honor societies, fraternities and sororities, and service clubs can be organized to provide information to the network.

Clients' Fees

The final source of money to which networks can turn is the fees it can charge for its services. Consumers are the primary beneficiaries of the services provided. They should support, at least partially, the services they use by the payment of fees. The theory that "one values what one pays for," has been true elsewhere in the "helping" professions and it can probably be appropriately applied to the services state networks would provide. Brokering "services" successfully support their activities through clients' fees, according to reports of the National Center for Educational Brokering. It states that although "people will not or cannot pay enough for educational counseling to cover its costs . . . they will pay more than the (actual) cost of instructional programs."[6] This suggests that particular portions of the network's activities may be able to demand more support from clients than others.

An important factor in deciding whether or not to charge fees is the effect it would have on those who need the service most: out-of-school individuals living in poverty who seek education or career training to move up and out. The problem can sometimes be avoided by securing indirect support (as from foundations or business organizations) for fee waivers.

Payments by Institutions

In a time of declining enrollments and increasing competition for students, some networks may successfully solicit support from the educational providers to which potential learners are directed. Although potentially fraught with difficulty, this can sometimes be done without compromising the independence of the constituent agencies or centers. The watchword here is "Proceed with Caution."

6. For more detail and explanation, see Chapter 8 of Heffernan, Macy, and Vickers, *Educational Brokering – A New Service for Adult Learners*. Syracuse, N.Y.: National Center for Educational Brokering, 1977.

Planning and Policy Considerations

Although it is recognized that state educational information networks will develop in various ways, there are some planning and policy considerations of concern to all. These include funding, network size, methods for developing relevant data, and choice of delivery systems.

Initial and Long Term Funding

Securing and assuring continuance of financial support is a major planning and policy matter. The Education Amendments of 1976 have provided for planning grants for state Educational Information Centers. Congressional initiative restored the recommended appropriation of $3 million for the 1979 fiscal year. Unless annual appropriations are secured for Educational Information Centers, comprehensive planning and implementation will be extremely difficult.

Some creative and useful programs have managed to exist in the hand-to-mouth atmosphere of short-term funding for many years. There are several Talent Search agencies (authorized initially by Title IV, Section 417B of the Higher Education Act of 1965) that have survived changing federal priorities. Even though there have been numerous occasions when it appeared that funding priorities had shifted away from Talent Search, these agencies were able to survive by relating their activities appropriately to various federal program eligibility requirements.

If the fully coordinated, comprehensive educational information center network described in this report is created, it will require long-term support because of the large number of agencies, organizations, activities, personnel, and clients involved. Heffernan, Macy, and Vickers have suggested that a sound financial base could be composed of fees from clients, revenues from contracts with institutions, and annual payments from state and/or local budgets. Many states will need to formulate legislation for annual appropriations, and coalitions will be needed for successful passage. Establishing major state and local funding on an annual basis would make it easier to provide the necessary services.

Network Size

The large number in the potential universe of organizations for a statewide network makes it imperative for planners to deal with the matter of size. Scarce financial resources will be a limitation.

Because the network's concerns are broad, there will be constant pressure for expansion. Therefore, network membership eligibility standards should include requirements for quality of service rendered, extent of resources available, cost factors, and types of clients' needs served. Requirements may take many forms, but probably should focus on the quality of information and service provided—including general criteria for selecting and training counselors and advisors, and requiring that agencies have community-based policy or advisory boards.

Initial planning will need to address policy issues that surround quality standards and periodic evaluation procedures for participating agencies and organizations. The network may reluctantly find itself unable to avoid the politically difficult role of "certifying" participants. If standards and procedures are clearly specified initially, subsequent problems will be less difficult.

A second reason why network planners and administrators will need to consider the size of the network is economic. Planners will need to acquire expertise at deriving cost figures for various services and in measuring their effectiveness. Thus, the size of the network may depend on the ability to relate anticipated costs to existing resources accurately.

A third reason for planning the size of the network is consideration for the needs of clients. When a large number of agencies and organizations are included, it is more difficult to maintain continuity of services tailored to clients' needs. Followup is more complex, and clients who are referred from one specialized agency to another might think they are getting the "runaround."

Developing Relevant Data

The success of any educational information center network will be determined by the accuracy and appropriateness of the data it uses.

A recent conference produced the following observations:[7]

"1. Characteristics of useful data for educational and career counseling (information, statistics, projections): data must be verifiable, frequently updated, accurate, and locally or regionally relevant. Career planning cannot be based on non-credible, unreliable, outdated, or only general information. Clients suffer directly and the counseling agency image is damaged severely if "help" is based on misinformation.

"2. Data must come from objective sources, preferably two or more sources. Often the originators of data unknowingly bias their data in terms of their own interests, orientations, sponsorship; e.g., manpower needs projections, college or university program descriptions, community resource information.

"3. Data aggregation schemes must stress standarization, uniformity of data to permit crossovers and the merging of various data sources. This helps to cut down duplication and repetition within data sources, and provides a common information discourse."

A useful handbook, *Developing Career-Related Materials for Use with and by Adults*, was produced by the Career Education Project (Newton, Mass.: Education Development Center, 1975).

Choice of Delivery Systems

Participants in the Rosslyn, Virginia conference viewed the primary problems as: "getting adults directly in contact with the information, presenting it in a form which is useful to adults, delivering it to where it will be most useful, and putting resources into the hands of counselors."

Gaps in reaching adults in all geographical areas will require new planning initiatives. One plan to consider is establishing service area planning boards for the network.[8]

---

7. *Educational and Occupational Counseling and Information Systems for Adults.* Report on a conference held at Rosslyn, Virginia, April 27 and 28, 1976. Available free on request from National Center for Educational Brokering, Office of Research and Publications, 405 Oak Street, Syracuse, N.Y. 13203

8. A delineation of functions of boards of this type is given in George J. Nolfi and Valerie I. Nelson, *Strengthening the Alternative Postsecondary Education System: Continuing and Part-Time Study in Massachusetts*, Vol. I. Cambridge, Mass.: University Consultants, Inc., 1973.

Since there is no best technique for delivery of information and counseling services, multiple techniques should be utilized. Appropriate evaluation will allow each state network to assess which techniques are best suited to its own local and regional requirements.

Planning Admonitions

Richard E. Peterson of Educational Testing Service has delineated admonitions in planning for state educational information centers:

"1. Indeed adopt lifelong learning ideas as the conceptual context for your planning. Make the assumption that the broad operating principal for your EICs is to assist individuals of all ages and economic circumstances to engage in whatever learning they choose, in whatever manner they may choose, and for whatever reasons they may have.

"2. Assume that all kinds of learning opportunities are potentially legitimate, and worthy of inclusion in the information system of your EIC. Assume that courses from the public school adult education program or local proprietary schools are as valid as those from the local community college. Assume that noncredit courses are as valid as those for credit, and that learning opportunities offered by the city recreation department, museums, churches, and other community organizations are likewise valid. Assume that other information systems in the area—learning exchanges and I and R services run by libraries, for example—are valid, and probably have useful information that your EICs don't have. Unquestionably fraudulent programs cannot be included, of course; yet it is better to err on the side of inclusivity, and let the marketplace work, than to be exclusive.

"3. Build and maintain links with all the providers of educational services in the area. The educational system presently existing in this country is arguably a fragmented, noninteracting nonsystem. Just possibly the cooperatively planned EICs can be a small start toward creating the sort of cooperating, communicating, educational apparatus necessary for efficiently serving populations of continuous or lifelong learners.

"4. Make special efforts to attract poorly educated people to your EICs. For moral, political, and other good reasons, your best, most

inventive, thinking should be given to devising strategies for reaching populations that have been badly served by the schools, and who may now be somewhat "turned off" by the prospect of more education.

"5. Finally . . . don't be parochial, and don't get coopted. For example, many of you are on staffs of state 1202 Commissions, and your main concern is ordinarily with traditional higher education. I would urge you, nonetheless, not to exclude all the other sources of learning, including even various means for facilitating 'do-it-yourself' learning. And, needless to say, the colleges and universities you coordinate have their own interests, toward which they may wish to turn the EICs. I urge you to be steadfast. The EICs must operate in the interest of individual learners first, rather than in behalf of powerful institutional or other interests."

Other Books of Interest from Future Directions for a Learning Society

40 Million Americans in Career Transition: The Need for Information
Solomon Arbeiter, Carol B. Aslanian,
Frances A. Schmerbeck, Henry M. Brickell

The detailed findings of a survey of the career transition needs of a representative sample of adults undergoing or anticipating job or career changes. (237403) 1978, 55 pages, $4.50

Lifelong Learning during Adulthood: An Agenda for Research
Future Directions for a Learning Society Advisory Panel
on Research Needs in Lifelong Learning during Adulthood

A report focusing on four basic areas: adult learners, providers of learning opportunities, the social context in which lifelong learning occurs, and interactions of learners, providers, and society. (237407) 1978, 59 pages, $4.50

The Missing Link: Connecting Adult Learners to Learning Resources
K. Patricia Cross

An exploration of the "missing link" between the interests of adult learners and the learning resources of society. (237402) 1978, 79 pages, $4.50

Telephone Counseling for Home-Based Adults
Solomon Arbeiter, Carol B. Aslanian,
Frances A. Schmerbeck, Henry M. Brickell

Highlights from the findings of a followup study of former home-based clients serviced by a telephone counseling project. (237405) 1978, 65 pages, $4.50

Orders accompanied by either a check made payable to the College Board or an institutional purchase order may be sent to:

College Board Publication Orders
Box 2815, Princeton, New Jersey 08541